

*1996*

*Nova Scotia Farm Management*

*Analysis Project*



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### **NOVA SCOTIA FARM MANAGEMENT ANALYSIS PROJECT**

The Nova Scotia Farm Management Analysis Project, or **FMAP**, is designed to assist Nova Scotia farm managers develop their business management knowledge and skills.

FMAP provides farm managers with a farm planning tool from which data is gathered. The compiled data gives a comparative analysis with similar farm businesses as well as a complete financial and production summary of their own business. A year-to-year analysis of business performance improves the farm manager's ability to recognize and react to opportunities resulting from change.

In 1996, 147 individual farm businesses participated in the Farm Management Analysis Project. Participants ranged from smaller part-time businesses to large multi enterprise farms.

At present, the FMAP is available to all Nova Scotia dairy, beef, hog, mink and tree fruit producers.

For further information, contact Gerald Post, Farm Management Specialist at 902-893-6581 or [GPost@gov.ns.ca](mailto:GPost@gov.ns.ca).

### **Formulas Used To Calculate Financial Analysis**

#### **1. Liquidity**

**Current Ratio = Current Assets ÷ Current Liabilities**

- The current ratio measures the business' ability to meet financial obligations as they come due without disrupting normal operations.
- If the ratio is greater than 1, the business is considered to be liquid. A ratio of less than 1 may indicate a potential liquidity problem.

**Working Capital = Current Assets - Current Liabilities**

- Working capital is the cash available to the business to meet financial obligations as they come due without disrupting normal operations.

#### **2. Solvency**

**Percent Equity = Owner's Equity ÷ Total Assets x 100%**

- Percent Equity is a measure of the owner's equity in the business. It measures the proportion of total assets financed by the owner of the business. A higher percentage indicates lower financial risk.

**Debt to Equity = Total Liabilities ÷ Owner's Equity**

- The debt to equity ratio is a measure of the extent to which creditors have financed the business compared to the owners. The higher the value of the ratio, the greater the proportion of financing that has been provided by creditors.

#### **3. Profitability**

**Return on Assets = (Net Income + Interest - Value of Operator and Unpaid Family Labour) x 10 ÷ Average Total Assets for the Period.**

- Return on assets shows the business' ability to earn a return on its total assets. The higher the value, the greater the return on assets. The value of operator and unpaid family labour reflects the value in the local marketplace for similar work. This was assumed to be \$8/hr.

**Return on Equity = (Net Income - Value of Operator and Unpaid Family Labour) x 100% ÷ Average Owner Equity.**

- Return on equity provides a measure of the return to the owner on his/her investment in the business. The higher the percentage, the greater the return on equity.

**Capital Turnover = Revenue ÷ Total Assets**

- This ratio indicates the extent to which a business utilizes its assets to generate revenue. A high ratio indicates efficient use of assets.

#### **4. Financial Efficiency**

**Contribution Margin = Contribution Margin x 100% ÷ Revenue**

The contribution margin percentage measures the financial efficiency of the business in terms of funds generated directly from operations. The higher the ratio, the more efficient the business.

**Capital Replacement, Personal Exemption & Debt Servicing Margin = Net Income + Interest on Term Debt + Depreciation**

This amount represents the dollars generated from operations that are viable to cover capital replacement, withdrawals for personal living expenses, and to make annual payments on all debt.

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*Dairy  
Farm Business  
Management  
Analysis*

## Income Statement

	Total	Per Cow	Per HL
<b>REVENUE</b>			
Milk Sales	\$262,198	\$4,166	\$55.89
Milk Subsidies	7,389	117	1.58
Milk Premium	176	3	0.04
Livestock Sales	18,485	294	3.94
Crop Sales	5,138	82	1.10
Miscellaneous	22,993	365	4.90
<b>TOTAL REVENUE</b>	<b>\$316,379</b>	<b>\$5,026</b>	<b>\$67.44</b>
<b>Less Cost of Goods Sold</b>			
Beginning Inventory (Feed, Crops, Lvstk)	\$133,043	\$2,114	\$28.36
Feed & Supplements	63,505	1,009	13.54
Crop Expense	20,301	323	4.33
Livestock Purchase	4,646	74	0.99
Less Ending Inventory (Feed, Crops, Lvstk)	(141,129)	(2,242)	(30.08)
<b>COST OF GOODS SOLD</b>	<b>\$80,365</b>	<b>\$1,277</b>	<b>\$17.13</b>
<b>GROSS MARGIN</b>	<b>\$236,014</b>	<b>\$3,750</b>	<b>\$50.31</b>
<b>OPERATING EXPENSES</b>			
Milk Hauling	\$10,399	\$165	\$2.22
Vet and Medicine	4,790	76	1.02
Breeding	4,612	73	0.98
Dairy Supplies & Services	8,134	129	1.73
Milk Marketing Costs	8,659	138	1.85
Truck & Auto Expense	4,931	78	1.05
Custom Work	1,898	30	0.40
Hired Labour	26,990	429	5.75
Tractor & Machinery Repairs	15,903	253	3.39
Building & Fence Repairs	5,748	91	1.23
Utilities	7,211	115	1.54
Miscellaneous	4,569	73	0.97
<b>TOTAL OPERATING EXPENSES</b>	<b>\$103,844</b>	<b>\$1,650</b>	<b>\$22.14</b>
<b>NET OPERATING INCOME</b>	<b>\$132,169</b>	<b>\$2,100</b>	<b>\$28.17</b>
<b>FIXED EXPENSES</b>			
Rentals & Leases	\$4,507	\$72	\$0.96
Insurance & Taxes	7,520	119	1.60
Interest	30,680	487	6.54
Depreciation	30,682	487	6.54
<b>TOTAL FIXED EXPENSES</b>	<b>\$73,389</b>	<b>\$1,166</b>	<b>\$15.64</b>
<b>NET INCOME (LOSS)</b>	<b>\$58,780</b>	<b>\$934</b>	<b>\$12.53</b>

## Balance Sheet

	1996
<b>CURRENT ASSETS</b>	
Cash	\$2,626
Accounts Receivable	11,135
Inventory (Note 1)	
Livestock	107,386
Crops and Supplies	33,743
<b>TOTAL CURRENT ASSETS</b>	<b>\$154,890</b>
<b>LONG TERM ASSETS</b>	
Machinery & Equipment (Note 2)	\$89,695
Land & Buildings (Note 2)	180,237
Milk Quota	158,976
Co-op Dairy Investment	47,986
<b>TOTAL LONG TERM ASSETS</b>	<b>\$476,895</b>
<b>TOTAL ASSETS</b>	<b>\$631,785</b>
<b>LIABILITIES AND OWNER'S EQUITY</b>	
<b>CURRENT LIABILITIES</b>	<b>\$30,476</b>
<b>LONG TERM LIABILITIES</b>	<b>362,657</b>
<b>TOTAL LIABILITIES</b>	<b>\$393,133</b>
<b>OWNER'S EQUITY</b>	<b>\$238,653</b>
<b>TOTAL LIABILITIES AND OWNER'S EQUITY</b>	<b>\$631,785</b>

		<b>Per Cow</b>	<b>Per HL</b>
Total Assets	(\$)	10,037	135
Total Liabilities	(\$)	6,246	84
Fixed Expenses as % of Total Cost	(%)	28	28
Variable Expenses as % of Total Cost	(%)	72	72

- (1) Livestock inventory includes all breeding stock, market livestock and animals retained for replacements. Crops and supplies inventory includes all feed, fertilizer and supplies. Inventory values are based on an estimate of Fair Market.
- (2) Land is valued at its original cost. All depreciable assets are valued at cost less accumulated depreciation or book value. The book values are taken from the Capital Cost Allowance (CCA) schedules in the income tax returns.

**Financial Analysis**

Financial Measure	1996
1. Liquidity:	
Current Ratio	5.1
Working Capital (\$)	124,414
2. Solvency:	
Percent Equity (%)	38
Debt to Equity Ratio (%)	1.6
3. Profitability	
Return on Assets (%)	9.5
Return on Equity (%)	12.9
Capital Turnover (Times/Yr)	0.5
4. Financial Efficiency	
Interest as % of Revenue (%)	10
Contribution Margin (%)	42
Capital Replace., Personal Exp. & Debt Servicing Margin (\$)	117,750

# 1996 Dairy Farm Business Analysis

## Production Management

<b>(A) Milk Production</b>					
Cash Expense	(\$)	235,003	Milk Receipts	(\$)	270,146
Depreciation	(\$)	30,682	Net Return	(\$)	9,920
Inventory Change	(\$)	(8,086)			
Interest on Equity (1)	(\$)	18,054	Average # of Cows	(hd)	63
Unpaid Family Labour	(\$)	3,598	Milk Sold per Farm	(HL)	4,691
Operator Labour (2)	(\$)	27,591	Milk Sold per Cow	(L)	7,453
Less:					
Sales (Excl. Milk)	(\$)	46,616			
Net Cost of Producing Milk	(\$)	260,226	Net Cost pr HL of Milk	(\$/HL)	55.47
<b>(B) Production Analysis</b>				<b>Per Cow</b>	<b>Per HL</b>
Feed Expense	(\$)			1,009	13.54
Crop Expense	(\$)			323	4.33
Machinery Expense (Excl. Depreciation)	(\$)			253	3.39
Total Feed & Crop Expense	(\$)			1,584	21.25
Total Feedstuffs Used	(Kg)			5,167	69
Total Concentrate	(Kg)			2,045	2.7
<b>(C)Labour Analysis</b>					
Hired Labour	(PE's)			0.9	
Unpaid Family Labour	(PE's)			0.2	
Number of Operators (3)	(PE's)			1.3	
Total Labour Units	(PE's)			2.4	
Hired Labour Expense	(\$/hr)			10.96	
Total Hired Labour Expenses	(\$)			26,990	
Cows Per P.E.	(hd)			26	
Milk Sold per P.E.	(HL/P.E.)			1,929	

- (1) Interest on equity is assumed to be 5%.
- (2) A standard figure of \$21,000. for one P.E. per year is used.
- (3) One P.E. (Person Equivalent) is equal to 2600 hours of labour per year, i.e. 50 hours per week times 52 weeks per year. One operator was assumed to be equal to one person equivalent.



# 1996 Dairy Farm Business Analysis

Management Factors		Average 10 Farms 70 Kgs. & Over	Average 40 Farms 35-70 Kgs.	Average 30 Farms 0-35 Kgs.
Cows Per Farm	(#)	132	64	39
Milk Sold Per Farm	(HL)	10,475	4,899	2,582
Milk Sold Per Cow	(L)	7,920	7,596	6,638
Milk Sold per Cow	(\$)	4,587	4,349	3,820
Purchased Feed Per Cow	(\$)	1,045	1,003	940
Purchased Feed Per HL Milk Sold	(\$)	13.19	13.20	14,016
Crop Expenses/HL Milk Sold	(\$)	3.66	4.65	4.01
Machinery Expense/HL Milk Sold	(\$)	2.87	3.65	3.44
Total Feed & Crop Expense Per HL	(\$)	19.72	21.51	21.61
Hired Labour - Person Equivalents	(#)	1.9	1.0	0.5
Operator & Family Labour - Person		2.0	1.5	1.3
Milk Sold/Person Equivalents	(L)	2,651	1,974	1,403
Cows/Person Equivalents	(#)	33	26	21
Total Farm Income	(\$)	704,507	327,380	174,862
Total Farm Expense	(\$)	366,655	188,152	100,902
Net Farm Income	(\$)	165,884	56,994	28,186
Total Farm Income in \$/HL	(\$)	67.26	66.83	67.72
Total Farm Expense in \$/HL	(\$)	51.42	55.20	56.80
Net Farm Income in \$/HL	(\$)	15.84	11.63	10.92
Net Farm Income as % Of Sales	(%)	23.5	17.4	16.1
Variable Cost as % of Total Sales	(%)	53.5	59.4	60.1
Fixed Cost as % of Total Sales	(%)	22.9	23.2	23.8
Total Assets	(\$)	1,380,710	644,167	371,074
Total Liabilities	(\$)	635,737	439,447	257,212
Total Equity	(\$)	744,973	204,720	113,862
Equity in Farm Business	(%)	54.0	31.8	30.7
Return on Equity	(%)	16.77	14.74	2.63
Return on Assets	(%)	12.95	9.71	5.60
Capital Turnover	(YRS)	0.5	0.5	0.5
Total Assets Per HL	(\$)	132	132	144
Liabilities Per HL	(\$)	61	90	100
Operating Expense Ratio	(%)	57.3	63.2	63.7
Operating Profit Margin Ratio	(%)	25.1	18.4	11.4
Total Liabilities/Gross Revenue		0.9	1.3	1.5
Cost Control		23.5	17.4	16.1
Degree of Leverage		2.03	1.75	1.68
Working Capital	(\$)	265,272	130,496	71,653
Current Assets/Current Liabilities		5.0	3.8	4.6
Total Assets/Total Liabilities		2.2	1.5	1.4
Debt/Equity		0.9	2.1	2.3
Earnings Available for Family Living; Income Taxes; Debt Repayment; New Investment	(\$)	300,752	120,532	63,507
Total Farm Revenue	(\$)	704,507	327,380	174,862
Total Variable Expenses	(\$)	386,885	204,613	110,335
Contribution Margin	(\$)	327,473	132,991	69,744
Total Fixed Expenses	(\$)	161,589	75,997	41,558
Net Income	(\$)	165,884	56,994	28,186
Unpaid Labour (Person Equivalents)	(#)	2.0	1.5	1.3
Family Living Expense	(\$/PE)	50,250	36,619	33,375
Residual (Principal, New Investment)	(\$)	115,634	20,376	(5,189)

## 1996 Dairy Farm Business Analysis

Management Factors		1996 80 Farms	1995 95 Farms	1994 104 Farms	1993 Average
Cows per Farm	(#)	63	57	59	61
Milk Sold per Farm	(HL)	4,727	4,193	4,159	4,277
Milk Sold per Cow	(L)	7,460	7,304	7,062	7,026
Milk Sold per Cow	(\$)	4,289	4,281	4,132	4,130
Purchased Feed per Cow	(\$)	999	876	825	806
Purchased Feed per HL Milk Sold	(\$)	13.40	11.99	11.68	11.46
Crop Expenses per HL Milk Sold	(\$)	4.24	4.16	3.43	3.55
Machinery Expense per HL Milk Sold	(\$)	3.39	3.18	3.05	3.22
Total Feed & Crop Expense per HL	(\$)	21.03	19.33	18.17	18.24
Hired Labour - Person Equivalents	(#)	0.9	0.8	0.9	0.9
Operator & Family Labour - Person Equivalents	(#)	1.5	1.4	1.6	1.5
Milk Sold per Person Equivalent	(HL)	1,950	1,850	1,703	1,750
Cows per Person Equivalent	(#)	26	25	24	25
Total Farm Income	(\$)	317,323	290,622	290,284	300,360
Total Farm Expense	(\$)	177,746	237,575	224,938	235,415
Net Farm Income	(\$)	59,793	53,047	65,345	64,944
Total Farm Income in \$/HL	(\$)	67.13	69.31	69.79	70.23
Total Farm Expense in \$/HL	(\$)	54.48	56.66	54.08	55.04
Net Farm Income in \$/HL	(\$)	12.65	12.65	15.71	15.18
Net Farm Income as % of Sales	(%)	18.8	18.3	22.5	21.6
Variable Cost as % of Total Sales	(%)	57.9	60.3	58.5	59.3
Fixed Cost as % of Total Sales	(%)	23.3	21.4	19.0	19.1
Total Assets	(\$)	633,825	599,274	570,325	595,860
Total Liabilities	(\$)	395,645	320,522	319,445	299,251
Total Equity	(\$)	238,180	278,752	250,880	296,608
Equity in Farm Business	(%)	37.6	46.5	44.0	49.8
Return on Equity	(%)	13.24	9.78	13.95	11.81
Return on Assets	(%)	9.72	8.24	9.96	9.17
Capital Turnover	(YRS)	0.5	0.5	0.5	0.5
Total Assets per HL	(\$/HL)	134	143	137	139
Liabilities per HL	(\$/HL)	84	76	77	70
Operating Expense Ratio	(%)	61.7	63.7	62.1	63.0
Operating Profit Margin	(%)	18.8	17.34	18.92	19.34
Total Liabilities/Gross Revenue		1.2	1.1	1.1	1.0
Cost Control (Net Income/Total Expenses)	(%)	18.8	18.3	22.5	21.6
Degree of Leverage (Contribution Margin/Fixed Expenses)		1.81	1.85	N/A	N/A
Working Capital	(\$)	125,277	101,777	110,306	115,219
Current Assets/Current Liabilities		4.2	4.4	4.8	N/A
Total Assets/Total Liabilities		1.6	1.9	1.8	2.0
Debt/Equity		1.7	1.1	1.3	1.0

*Swine  
Farm Business  
Management  
Analysis*

*Farrow to Finish*

1996 Swine Farm Business Analysis - Farrow To Finish

Income Statement

REVENUE	Head Shipped	Total	Per Sow	Percent of Total Revenue
Market Hogs	3,271	\$532,013	\$2,440.43	77.59
Weanlings	724	40,691	186.66	5.93
Gilts - Breeding Stock	147	26,630	122.16	3.88
Boars - Breeding Stock	2	846	3.88	0.12
Cull Sows	101	20,091	92.16	2.93
Cull Boars	5	816	3.74	0.12
Other Hogs	43	4,217	19.34	0.61
<b>TOTAL HOG SALES</b>		625,305	2,868.37	91.19
Provincial Capital Assistance		23,824	109.29	3.47
Hog Assistance Programs		6,184	28.36	0.90
Other Income		26,445	121.31	3.86
<b>TOTAL CURRENT INCOME</b>		681,758	3,127.33	99.43
Value of Inventory Change		3,930	18.03	0.57
<b>TOTAL REVENUE</b>		\$685,688	\$3,145.36	100.00
<b>VARIABLE EXPENSES</b>				
Feed Purchased		\$368,621	\$1,690.92	53.76
Swine Purchased		32,860	150.73	4.79
Hired Labour		50,443	231.39	7.36
Bedding		972	4.46	0.14
Vet and Drugs		9,972	45.74	1.45
Hog Supplies		3,572	16.39	0.52
Risk Management Service		7,945	36.45	1.16
Marketing Costs		5,197	23.84	0.76
Utilities		19,254	88.32	2.81
Truck & Machinery*		14,301	65.60	2.09
Auto Expense		8,762	40.19	1.28
Interest - Operating		5,113	23.46	0.75
Professional Fees		2,207	10.13	0.32
Miscellaneous		2,451	11.24	0.36
Other Non-Hog Expenses		16,828	77.19	2.45
<b>TOTAL VARIABLE EXPENSES</b>		\$548,498	\$2,516.05	79.99
<b>CONTRIBUTION MARGIN</b>		\$137,190	\$629.31	20.01
<b>FIXED EXPENSES</b>				
Leases and Rentals		\$5,841	\$26.79	0.85
Building & Equipment Repairs		13,616	62.46	1.99
Depreciation		31,182	143.04	4.55
Interest - Term Loans		21,598	99.07	3.15
Taxes		2,674	12.27	0.39
Insurance		6,310	28.94	0.92
<b>TOTAL FIXED EXPENSES</b>		\$81,221	\$372.57	11.85
<b>TOTAL EXPENSES</b>		\$629,719	\$2,888.62	91.84
<b>NET FARM INCOME (LOSS)</b>		\$55,969	\$256.74	8.16

\* Truck and Machinery includes the hog shipping charges.

1996 Swine Farm Business Analysis - Farrow To Finish

**Balance Sheet**

<b>ASSETS</b>	<b>Ending</b>	<b>Beginning</b>
<b>Current Assets</b>		
Cash On Hand	\$5,716	\$5,414
Accounts Receivable	14,649	12,460
Inventory		
Production Livestock	113,163	109,615
Feed	19,787	21,683
Other Current Assets	12,033	13,150
<b>TOTAL CURRENT ASSETS</b>	<b>\$165,347</b>	<b>\$162,322</b>
<b>Long Term Assets</b>		
Breeding Livestock	\$60,385	\$58,107
Machinery & Equipment	56,057	60,960
Land & Buildings	221,638	240,603
Other Fixed Assets	24,863	17,544
<b>TOTAL LONG TERM ASSETS</b>	<b>\$362,944</b>	<b>\$377,214</b>
<b>TOTAL ASSETS</b>	<b>\$528,291</b>	<b>\$539,536</b>
<b>TOTAL LIABILITIES AND OWNERS' EQUITY</b>		
<b>Current Liabilities</b>	<b>\$56,725</b>	<b>\$74,914</b>
<b>Long Term Liabilities</b>	<b>\$332,676</b>	<b>\$328,230</b>
<b>TOTAL LIABILITIES</b>	<b>\$389,401</b>	<b>\$403,144</b>
<b>Beginning Equity</b>	<b>\$136,392</b>	
+ Net Income	55,969	
- Withdrawal's	(53,471)	
<b>OWNER'S EQUITY</b>	<b>\$138,890</b>	<b>\$136,392</b>
<b>TOTAL LIABILITIES AND OWNERS' EQUITY</b>	<b>\$528,291</b>	<b>\$539,536</b>

**Financial Analysis**

<b>Financial Measure</b>	<b>Ending</b>	<b>Beginning</b>
<b>1. Liquidity:</b>		
Current Ratio	2.91	2.17
Working Capital	108622	87408
<b>2. Solvency:</b>		
Percent Equity	26.3	25.3
Debt/Equity Ratio	2.80	2.96
Assets per Sow	2423	
Debt per Sow	1786	
<b>3. Profitability:</b>		
Return on Assets	15.5	
Return on Equity	40.7	
Capital Turnover	1.30	
<b>4. Financial Efficiency</b>		
Interest as % of Revenue	3.9	
Term Debt Coverage Ratio	5.4	

1996 Swine Farm Business Analysis - Farrow To Finish

**Enterprise Analysis  
Per Pig Weaned Or Finished**

<b>Pigs Transferred or Marketed</b>	<b>Pigs Weaned</b>	<b>Hogs Finished</b>
Farrowing	4397	
Finishing		3495
<b>RETURNS BY ENTERPRISE</b>		
Market Value*	56.23	162.80
Cull Sales	4.76	
Program Payments		8.59
Change in Hog Inventory	0.50	1.04
<b>COST OF SALES</b>		
Feed	29.74	69.04
Swine Purchased/Transfer Value**	7.59	64.23
<b>TOTAL COST OF SALES</b>	<b>\$37.33</b>	<b>\$133.27</b>
<b>GROSS MARGIN</b>	<b>\$24.15</b>	<b>\$39.15</b>
<b>OPERATING EXPENSES</b>		
Labour - Hired	6.63	6.10
- Unpaid	3.45	2.23
Bedding	0.17	0.06
Vet & Drugs	1.40	1.10
Hog Supplies	0.46	0.45
Marketing Costs	0.00	3.76
Utilities	2.87	1.90
Truck & Machinery Expense	0.63	3.30
Auto Expense	0.72	1.60
Interest - Operating	0.47	0.87
Miscellaneous	0.26	0.38
<b>TOTAL OPERATING EXPENSES</b>	<b>\$17.06</b>	<b>\$21.75</b>
<b>CONTRIBUTION MARGIN</b>	<b>\$7.09</b>	<b>\$17.40</b>
<b>FIXED EXPENSES</b>		
Taxes	0.32	0.36
Insurance	0.74	0.87
Leases and Rentals	0.57	0.95
Building & Equipment Repairs	1.65	1.82
Depreciation	3.93	3.98
Interest - Term Loans	2.63	2.87
<b>TOTAL FIXED EXPENSES</b>	<b>\$9.84</b>	<b>\$10.85</b>
<b>TOTAL FARM EXPENSES</b>	<b>\$64.23</b>	<b>\$165.87</b>
<b>NET RETURN TO ENTERPRISES</b>	<b>(\$2.75)</b>	<b>\$6.55</b>

\* Market value of a weaner sold.

\*\* Higher of market value or cost of a weaner entering the finishing operation.

## Production Analysis

(A) Cost of Production	Total	Per Sow
Total Farm Expenses	\$629,719	\$2,888.62
Plus: Adj. for Livestock Inventory Change	(3,548)	(16.27)
Less: Non Hog Expenses	16,828	77.19
Cull Sales	20,908	95.91
Hog Purchases	4,914	22.54
<b>Total Costs</b>	<b>\$583,523</b>	<b>\$2,753.90</b>
Total Kgs. of Market Hog Equivalents (L.W.)	362604	
Average Cost of Production (L.W.)	\$1.61	
Average Cost of Production (D.W.)	\$2.01	

(B) Inventory Flow	Boars	Sows	Piglets	Production Stock*
Beginning Inventory	10	217	322	1,544
+ Purchases/Births	4	79	4,962	92
+ Transfers In	3	32		4,331
+ Transfers Out			4,331	32
- Sales	5	101		4,187
- Deaths		6	637	210
- Ending Inventory	11	220	315	1,490
Discrepancy	0	0	0	48

(C) Livestock Production Analysis			
<b>Farrowing Unit</b>			
Pigs Born	5,303		
Pigs Born Alive	4,962	Pigs Weaned	4,331
Still Births (#)	341	Suckling Mortality (#)	637
Still Births (%)	6.4	Suckling Mortality (%)	12.8
<b>Breeding Herd Performance</b>			
Number of Litters	467	Average # of Boars	10.3
Average Number of Sows	218	Sows per Boar	21.2
Litters per Sow	2.14	Pigs Born per Sow	24.3
Pigs Born Per Litter	11.3	Pigs Born Alive per Sow	22.8
Pigs Born Alive/Litter	10.6	Pigs Weaned per Sow	19.9
Pigs Weaned/Litter	9.3	Sow Mortality	6
Market Equivalents/Sow	19.3	Sow Cull Rate	46.4
<b>Weaner &amp; Finishing Unit</b>		<b>Inventory Discrepancy</b>	
Weaner & Feeder Hog Mortality		Number	48
Number	210	Percent	1.1
Percent	4.8		

\* Production Stock includes Weaners, Feeders and Breeding Stock.



# 1996 Swine Farm Business Analysis - Farrow To Finish

## Management Analysis

(D) Labour		
Labour Person Equivalents	(#)	3.58
Hogs Produced per Person (L.W.)	(Kgs)	101,215
Gross Farm Income per Person	(\$)	191,399
Sows Kept Per Person*	(#)	61
Total Pigs Produced per Person	(#)	1,173
Net Income per Person - Unpaid	(\$)	62,361

(E) Feed Usage Analysis	
Sow Ration Fed per Sow & Boar	1,029
Total Feed per Sow	5,148
Feed Cost/100 Kgs. D.W. Hog Produced	123.78
Feed Conversion - Creep, Starter & Grower	2.45
Feed Conversion - Total Feed (L.W.)	3.10

FARROWING UNIT (PER WEANER PIG TRANSFERRED TO FINISHING OR SOLD)			
	Kgs. Per Head	Dollars Per Head	Cost Per Tonne Fed
Creep	3.35	2.55	761.25
Starter	28.11	10.78	383.56
Sow & Boar Feed	53.40	16.41	307.30
Total Feed per Pig Weaned	84.86	29.74	
FINISHING UNIT (PER HOG MARKETING)			
Starter	5.89	2.26	383.56
Grower	207.57	66.78	321.73
Total Feed per Finished Hog	213.45	69.04	
<b>TOTAL FEED (FARROW TO FINISH)</b>	<b>298.31</b>	<b>99.02</b>	<b>331.93</b>

\* One PE (Person Equivalent) is equal to one full time person for one year.



*1996 Swine Farm Business Analysis - Farrow To Finish*

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**Market Analysis**

<b>(F) Market Analysis</b>		
Ave. L.W. of Market Hogs Sold	(Kgs)	99.75
Average D.W. per Market Hog	(Kgs)	79.80
Average Carcass Grade Index		107.79
Average Market Price For Your Operation		2.05
Market Return per Hog Marketed		163.78
Support Payment for Market Hog		8.03
Total Return per Market Hog		171.81
Weaner Price Received	(Per Weaner)	56.23
Breeding Stock Sale Prices		
Gilts		180.91
Boars		423.00

*Swine  
Farm Business  
Management  
Analysis*

*Finishing*

1996 Swine Farm Business Analysis - Finishing

Income Statement

Revenue	Head Shipped	Total	Per Sow	Percent Of Total Revenue
Market Hogs	3820	631283	164.68	90.2
Other Hogs	14	981	0.26	0.1
<b>TOTAL HOG SALES</b>		632264	164.93	90.3
Provincial Cap.		24982	6.52	3.6
Hog Assistance Programs		8150	2.13	1.2
Other Income		14331	3.74	2.0
<b>TOTAL CURRENT INCOME</b>		679727	177.31	97.1
Value of Inventory Change		20419	5.33	2.9
<b>TOTAL REVENUE</b>		700146	182.64	100.0
<b>VARIABLE EXPENSES</b>				
Feed Purchased		298723	77.92	42.7
Swine Purchased		230916	60.24	33.0
Hired Labour		16796	4.38	2.4
Bedding		29	0.01	0.0
Vet and Drugs		1895	0.49	0.3
Hog Supplies		1210	0.32	0.2
Marketing Costs		7288	1.90	1.0
Risk Management Service		9384	2.45	1.3
Utilities		6628	1.73	0.9
Truck & Machinery Expense		3952	1.03	0.6
Auto Expense		4865	1.27	0.7
Professional Fees		1522	0.40	0.2
Lease & Rental		11827	3.09	1.7
Interest - Operating		3218	0.84	0.5
Miscellaneous		1376	0.36	0.2
Other Non-Hog Expenses		1510	0.39	0.2
<b>TOTAL VARIABLE EXPENSES</b>		601137	156.81	85.9
<b>CONTRIBUTION MARGIN</b>		99009	25.83	14.1
<b>FIXED EXPENSES</b>				
Building & Equipment Repairs		8270	2.16	1.2
Depreciation		27230	7.10	3.9
Interest - Term Loans		14075	3.67	2.0
Taxes		1934	0.50	0.3
Insurance		2945	0.77	0.4
<b>TOTAL FIXED EXPENSES</b>		54453	14.20	7.8
<b>TOTAL EXPENSES</b>		655590	171.02	93.6
<b>NET FARM INCOME (LOSS)</b>		44556	11.62	6.4

\* Truck and Machinery includes the hog shipping charges.

1996 Swine Farm Business Analysis - Finishing

**Balance Sheet**

<b>Assets</b>	<b>Ending</b>	<b>Beginning</b>
<b>Current Assets</b>		
Cash On Hand	157	(412)
Accounts Receivable	8891	6261
Inventory		
Livestock	126009	
Feed	<u>46553</u>	152142
Other Current Assets	2167	2167
<b>TOTAL CURRENT ASSETS</b>	<b>183776</b>	<b>160158</b>
<b>Long Term Assets</b>		
Machinery & Equipment	77461	61983
Land & Buildings	142645	139955
Other Fixed Assets	15503	5155
<b>TOTAL LONG TERM ASSETS</b>	<b>235609</b>	<b>207092</b>
<b>TOTAL ASSETS</b>	<b>419384</b>	<b>367250</b>
<b>TOTAL LIABILITIES AND OWNERS' EQUITY</b>		
<b>Current Liabilities</b>	<b>74275</b>	<b>66065</b>
<b>Long Term Liabilities</b>	<b>187225</b>	<b>158511</b>
<b>TOTAL LIABILITIES</b>	<b>261500</b>	<b>224575</b>
<b>Beginning Equity</b>	<b>142675</b>	
+ Net Income	44556	
- Withdrawals	(29347)	
<b>OWNERS' EQUITY</b>	<b>157885</b>	<b>142675</b>
<b>TOTAL LIABILITIES AND OWNERS' EQUITY</b>	<b>419384</b>	<b>367250</b>

1996 Swine Farm Business Analysis - Finishing

**Financial Analysis**

Financial Measure	Ending	Beginning
1. <b>Liquidity:</b>		
Current Ratio	2.47	2.42
Working Capital	\$109501	\$94093
2. <b>Solvency:</b>		
Percent Equity	38%	39%
Debt/Equity Ratio	1.7	1.6
Debt per Market Hog Equivalent	\$63.68	
3. <b>Profitability:</b>		
Return on Assets*	12.4%	
Return on Equity	21.0%	
Capital Turnover	1.67	
4. <b>Financial Efficiency</b>		
Interest as % of Revenue	2.5%	
Contribution Margin	14.1%	
Term Debt Coverage Ratio	N/A	

**Production Analysis**

(A) Cost Of Production	Total	Per Market Hog
Total Farm Expenses	655590	171.77
Less: Other Income	1510	0.40
Plus: Adj. for Inventory Change	(20419)	(5.35)
Return on Owners' Equity (@5%)	11081	2.90
Unpaid Operator & Family Labour	12950	3.39
<b>Total Costs</b>	<b>657692</b>	<b>172.32</b>
Total Kgs. of Pork Produced (Kgs. L.W.)	380990	100
Average Cost of Production (\$/Kg. D.W.)	\$2.16	\$2.16

(B) Market Analysis		
Ave. D.W. per Market Hog	(Kgs)	80.02
Average Carcass Grade Index	(Kgs)	108.0
Average Market Price for Your Operation	(\$/Kg)	\$2.07
Market Return per Hog Marketed		\$165.27
Support Payment per Market Hog		7.68
Total Return per Market Hog		\$172.95
Average Total Return for Your Operation	(\$Kg)	\$2.16

\* Production Stock includes Weaners, Feeders and Breeding Stock.

# 1996 Swine Farm Business Analysis - Finishing

(C) Feed Use			
Feed Cost/Kg Produced (L.W.)		(\$/Kg)	0.75
Feed Cost/100 Kgs of Gain (D.W.)		(\$/100 Kg)	93.68
Feed Cost/100 Kgs of Gain (L.W.)		(\$/100 Kg)	74.94
Feed Conversion - Starter & Grower		(Feed/Gain)	2.48
	<b>Kgs. Per</b>	<b>Dollars</b>	<b>Cost Per</b>
	<b>Hog</b>	<b>Per Hog</b>	<b>Tonne</b>
Starter Ration	41	14.29	347.23
Grower Ration	207	60.52	292.78
<b>Total Feed</b>	<b>248</b>	<b>74.81</b>	

(D) Labour		
Labour Person Equivalents	(#)	1.4
Production per Person (L.W.)	(Kgs)	278773
Gross Farm Income per Person	(\$)	512302
Net Income per Person Equivalent	(\$)	32602
Market Hog Equivalents Per Person	(#)	2793

\* One PE (Person Equivalent) is equal to one full time person for one year.

## Production Analysis

(E) Inventory			
Purchases of Weaners	(Hd)	3886	2.26%
Feeder Hog Mortality	(Hd)	86	
Inventory Discrepancy	(Hd)	0	
Market Hog Equivalents*	(Hd)	3817	
Inventory Change	(Hd)	(34)	
Market Hogs Sold	(Hd)	3820	

\* Note: Market Hog Equivalents = Market Hogs Sold + Other Hogs Sold + (Ending Inventory - Beginning Inventory) ÷ 2.

*Swine  
Farm Business  
Management  
Analysis*

*Sow-Weanling*

1996 Swine Farm Business Analysis - Sow-Weanling

Income Statement

Revenue	Head Shipped	Total	Per Sow	Percent Of Total Revenue
Weanlings	3770	221307	1168.73	58.70
Market Hogs	70	11880	62.74	3.15
Cull Sows	66	12706	67.10	3.37
Cull Boars	4	654	3.46	0.17
Other Hogs	5	572	3.02	0.15
<b>TOTAL HOG SALES</b>		247120	1305.05	65.55
Provincial Cap.		494	2.61	0.13
Hog Assistance Programs		2944	15.55	0.78
Other Income		2816	14.87	0.75
<b>TOTAL CURRENT INCOME</b>		253374	1338.08	67.21
Value of Inventory Change		577	3.05	0.15
<b>TOTAL REVENUE</b>		253951	1341.12	67.36
<b>VARIABLE EXPENSES</b>				
Feed Purchased		101450	535.76	26.91
Swine Purchased		19153	101.15	5.08
Hired Labour		17244	91.06	4.57
Bedding		1207	6.38	0.32
Vet and Drugs		6315	33.35	1.67
Hog Supplies		3871	20.44	1.03
Marketing Costs		269	1.42	0.07
Utilities		9534	50.35	2.53
Truck & Machinery Expense		2061	10.88	0.55
Auto Expense		2624	13.86	0.70
Interest - Operating		1318	6.96	0.35
Miscellaneous		2492	13.16	0.66
Other Non-Hog Expenses		0	0.00	0.00
<b>TOTAL VARIABLE EXPENSES</b>		167538	884.77	44.44
<b>CONTRIBUTION MARGIN</b>		86413	453.30	22.77
<b>FIXED EXPENSES</b>				
Rental / Lease / Custom Work		1215	6.41	0.32
Building & Equipment Repairs		7967	42.08	2.11
Depreciation		16032	84.67	4.25
Interest - Term Loans		11298	59.67	3.00
Taxes		1345	7.10	0.36
Insurance		1911	10.09	0.51
<b>TOTAL FIXED EXPENSES</b>		39768	210.02	10.55
<b>TOTAL EXPENSES</b>		207306	1094.79	54.99
<b>NET FARM INCOME (LOSS)</b>		46645	246.33	12.37

\* Truck and Machinery includes the hog shipping charges.



199 Swine Farm Business Analysis - Sow-Weanling

**Balance Sheet**

Assets	Ending	Beginning
<b>Current Assets</b>		
Cash On Hand	3988	3195
Accounts Receivable	2671	1436
Inventory		
Livestock	22791	
Feed	<u>1621</u>	26286
Other Current Assets	7847	5485
<b>TOTAL CURRENT ASSETS</b>	<b>38919</b>	<b>36401</b>
<b>Long Term Assets</b>		
Breeding Livestock	52050	50500
Machinery & Equipment	32985	33967
Land & Buildings	112494	119995
Other Fixed Assets	9986	7574
<b>TOTAL LONG TERM ASSETS</b>	<b>207515</b>	<b>212037</b>
<b>TOTAL ASSETS</b>	<b>246434</b>	<b>248438</b>
<b>TOTAL LIABILITIES AND OWNERS' EQUITY</b>		
<b>Current Liabilities</b>	27604	26226
<b>Long Term Liabilities</b>	144629	146006
<b>TOTAL LIABILITIES</b>	<b>172232</b>	<b>172232</b>
<b>Beginning Equity</b>	76206	
+ Net Income	46645	
- Withdrawals	(48650)	
<b>OWNERS' EQUITY</b>	<b>74201</b>	<b>76206</b>
<b>TOTAL LIABILITIES AND OWNERS' EQUITY</b>	<b>246434</b>	<b>248438</b>

**Financial Analysis**

Financial Measure	Ending	Beginning
<b>1. Liquidity:</b>		
Current Ratio	1.4	1.4
Working Capital	\$12693	\$10175
<b>2. Solvency:</b>		
Percent Equity	30.1%	30.7%
Debt/Equity Ratio	2.3	2.3
Assets per Sow	\$1295	\$1318
Debt per Sow	\$905	\$914
<b>3. Profitability:</b>		
Return on Assets*	14.7%	
Return on Equity	33.5%	
Capital Turnover	0.97	
<b>4. Financial Efficiency</b>		
Interest as % of Revenue	5.0%	
Contribution Margin	34.0%	
Term Debt Coverage Ratio	N/A	

1996 Swine Farm Business Analysis - Sow-Weanling

**Production Analysis**

(A) Cost Of Production	Total	Per Market Hog
Total Farm Expenses	207306	1094.79
Plus: Adj. for Lvstk. Inventory Change	(577)	(3.05)
Less: Cull Sales	13360	70555
Hog Purchases	687	3.63
<b>Total Costs</b>	<b>192682</b>	<b>1017.56</b>
Total Kgs. of Weaner Produced (Kgs. L.W.)	75220	397
Average Cost of Production: Per Kilogram	\$2.56	
Per Weaner	\$50.40	

(B) Inventory Flow	Boars	Sows	Piglets	Production Stock*
Beginning Inventory	8	188	280	403
+ Purchases/Births	4	60	4442	11
+ Transfers In		16		3890
+ Transfers Out			3890	16
- Sales	4	66		3841
- Deaths		8	552	55
- Ending Inventory	9	190	279	364
Discrepancy	(1)	0	0	28

\* Production Stock includes Weaners, Feeders and Breeding Stock.

(C) Livestock Production Analysis			
<b>Farrowing Unit</b>			
Pigs Born	4713		
Still Births (#)	271.6	Suckling Deaths	552
Still Births (%)	5.8	Suckling Mortality	12.4
Pigs Born Alive	4442	Pigs Weaned	3890
<b>Breeding Herd Performance</b>			
Number of Litters	421	Average # of Boars	8.2
Average Number of Sows	189	Sows per Boar	23.1
Litters per Sow	2.2	Sow Cull Rate	35.0
Pigs Born per Litter	11.2	Born per Sow	24.9
Pigs Born Alive per Litter	10.6	Born Alive per Sow	23.5
Market Equivalents per Sow	20.2	Weaned per Sow	20.5
<b>Weaner &amp; Finishing Unit</b>			
Weaner & Feeder Hog Mortality		Inventory Discrepancy	
Number	55	Number	28
Percent	1.4	Percent	0.7

# 1996 Swine Farm Business Analysis - Sow-Weanling

(D) Livestock Analysis		
Average L.W. per Weanling Sold	(kg)	18.63
Market Return per Weaner	(\$)	58.70

(E) Labour		
Labour Person Equivalents	(#)	1.86
Weaners Produced Per Person	(Kgs)	40,348
Weaners Produced Per Person	(#)	2,051
Sows Kept Per Person*	(#)	102
Gross Farm Income Per Person	(\$)	136,219

\* One PE (Person Equivalent) is equal to one full time person for one year.

(F) Feed Analysis			
Farrowing Unit (Per Weaner Pig Transferred to Finishing or Sold)			
	Kgs	Dollars	Per Tonne
Creep Feed	1.28	\$1.06	\$828
Starter	17.97	7.73	\$430
Sow & Boar Feed	54.30	16.17	\$298
Total Feed	73.55	\$24.96	
Feed per Sow & Boar	1051.00	\$312.98	

*Mink  
Farm Business  
Management  
Analysis*

# 1996 Mink Farm Business Analysis

## Income Statement

	Total	Per Breeding Female*	Per Mink Produced**
<b>REVENUE</b>			
Pelt Sales (Note 1)	185930	130.15	41.59
Breeding Stock	5979	4.19	1.34
Other Mink Sold	0	0.00	0.00
Feed Sales	5106	3.57	1.14
Subsidies	13	0.01	0.00
Miscellaneous	3892	2.72	0.87
Adjustment for Inventory Change	24558	17.19	5.49
<b>TOTAL REVENUE</b>	<b>225478</b>	<b>157.83</b>	<b>50.43</b>
<b>VARIABLE COSTS</b>			
Breeding Stock Purchases	3666	2.57	0.82
Other Mink Purchased	0	0.00	0.00
Feed & Supplements	59941	41.96	13.41
Vet & Medicine	2402	1.68	0.54
Supplies	2419	1.69	0.54
Marketing	12022	8.42	2.69
On-Farm Pelting	7175	5.02	1.60
Custom Pelting	7459	5.22	1.67
Hired Labour (Non-Pelting)	45022	31.52	10.07
Truck & Machinery - Fuel & Repairs	10058	7.04	2.25
Building Repairs	6198	4.34	1.39
Utilities	4636	3.24	1.04
Interest on Operating Loans	5354	3.75	1.20
Other Cash Operating Costs	5003	3.50	1.12
<b>TOTAL VARIABLE COSTS</b>	<b>171356</b>	<b>119.95</b>	<b>38.33</b>
<b>CONTRIBUTION MARGIN (Note 2)</b>	<b>54122</b>	<b>37.89</b>	<b>12.11</b>
<b>FIXED COSTS</b>			
Term Leases & Rentals	1109	0.78	0.25
Insurance & Taxes	1998	1.40	0.45
Interest on Long-Term Debt	2080	1.46	0.47
Depreciation	13705	9.59	3.07
<b>TOTAL FIXED COSTS</b>	<b>18892</b>	<b>13.22</b>	<b>4.23</b>
<b>TOTAL COSTS</b>	<b>190248</b>	<b>133.17</b>	<b>42.55</b>
<b>NET INCOME (LOSS) (Note 3)</b>	<b>35231</b>	<b>24.66</b>	<b>7.88</b>

\* Number of females is determined by averaging the beginning and ending number of females.

\*\* The number of mink produced equals total pelt sales + breeding stock sales + other mink sales + ending inventory of breeding stock and pelt carry over - beginning inventory of breeding stock and pelt carry over.

Note 1: All US dollars were converted into Canadian dollars using the actual exchange that the producer received at the time of payment.

Note 2: Contribution Margin: Total farm cash revenues less total farm variable costs. This is the amount available to cover fixed costs and profit.

Note 3: Net Income = Return to operator and unpaid family labour, management and equity capital.

*Mink*

*1996 Mink Farm Business Analysis*

**Balance Sheet**

<b>ASSETS</b>		
	<b>1996</b>	<b>1995</b>
<b>CURRENT ASSETS</b>		
Cash	21072	4289
Accounts Receivable (Note 1)	173086	183928
Inventory (Note 2)		
Mink, Pelts 11,774		
Feed 1,790	13564	7923
Other Current Assets	5304	6879
<b>TOTAL CURRENT ASSETS</b>	<b>213026</b>	<b>203018</b>
<b>LONG TERM ASSETS</b>		
Breeding Stock	130594	111677
Machinery & Equipment (Note 3)	56318	50097
Land, Buildings, and Pens (Note 3)	55211	45334
Other Fixed Assets	3163	11454
<b>TOTAL LONG TERM ASSETS</b>	<b>245285</b>	<b>218562</b>
<b>TOTAL ASSETS</b>	<b>458311</b>	<b>421580</b>
<b>LIABILITIES AND OWNER'S EQUITY</b>		
<b>CURRENT LIABILITIES (Note 4)</b>	<b>85386</b>	<b>47436</b>
<b>LONG TERM LIABILITIES</b>	<b>85418</b>	<b>94645</b>
<b>TOTAL LIABILITIES</b>	<b>170804</b>	<b>142081</b>
<b>OWNER'S EQUITY</b>	<b>287507</b>	<b>279500</b>
<b>TOTAL LIABILITIES AND OWNER'S EQUITY</b>	<b>458311</b>	<b>421580</b>

**Notes:**

Note 1: For purposes of this study, current income and expenses are recorded on an accrual basis. The pelts which were produced in the current year are sold at the sale the following year. These pelts appear as income in the current year and as accounts receivable at the fiscal year end. When payment is received for the pelts, it is debited to the cash account with a corresponding reduction in accounts receivable.

Note 2: Livestock inventory includes all pelts that were carried over from the previous year. Crops and supplies inventory includes all feed, and supplies on hand at year-end. Inventory values are based on Fair Market Value at fiscal year end.

Note 3: All depreciable assets are valued at "cost less accumulated depreciation", or book. Land is valued at its original cost or acreage x \$200. per acre.

Note 4: Current Liabilities include all debts that are due within one year, including the current portion of long term debt.

**Financial Analysis**

Financial Measure	1996	1995
<b>1. Liquidity:</b>		
Current Ratio	2.49	4.28
Working Capital (\$)	127640	155582
<b>2. Solvency:</b>		
Percent Equity (%)	62.7	66.3
Debt to Equity Ratio (%)	0.59	0.51
<b>3. Profitability:</b>		
Return on Assets (%)	3.9	24.6
Return on Equity (%)	4.3	32.8
Capital Turnover (YRS)	2.03	1.68
<b>4. Financial Efficiency:</b>		
Interest as % of Revenue (%)	3.30	3.51
Contribution Margin Ratio (%)	0.24	0.54
Disposable Income (\$)	26457	108569
<b>5. Miscellaneous Financial Analysis:</b>		
Total Assets (\$ per breeder female)	320.82	295.11
Total Liabilities (\$ per breeder female)	119.56	99.46



## Management Analysis

Livestock Production					
Pelts Sold	(#)	3917	Pelts Produced per Female	(pl/hd)	3.1
Breeding Stock Sold	(hd)	66	Breeder Females Housed	(hd)	1429
Other Mink Sold	(hd)	0	Breeder Males Housed	(hd)	301
Number of Pelt Sales per Breeder Female	(pl/hd)	2.7	Females per Male	(hd)	4.8
			Total Milk Produced	(hd)	4471
Labour Analysis					
Hired Labour Units (2)	(PE's)	1.9	Hired Labour Expense	(\$)	49705
Unpaid Family Labour Units	(PE's)	0.2	Hired Labour Wage Rate	(\$/hr)	10.17
Number of Operators (3)	(PE's)	1.1	Pelting Labour Expense	(\$)	4683
Total Labour Units	(PE's)	3.1	Breeder Females Per Person		
Milk Produced per Person	(hd)	1441	Equivalent	(hd)	461
Analysis of Sales					
Average Price Of:		Pelt Size As A Percentage of Total Pelts			
Dark Male Pelts	(\$)	48.00		Male	Female
Dark Female Pelts	(\$)	47.96	(0/1)	45.2	0.0
All Dark Pelts	(\$)	47.98	2	6.7	0.0
Mutations	(\$)	37.01	3	0.8	38.4
Breeder Pelts	(\$)	30.75	4	0.1	8.3
			5	0.5	0.7
			Total	53.1	47.3
Pelt Quality				Male	Female
Male Pelts	(%)	51.1	Select Maj/Bigloma	58.2	66.8
Female Pelts	(%)	46.7	Majestic/Gloma	17.6	13.5
Breeder Pelts	(%)	2.1	Mutations	2.0	1.1
Total	(%)	100.0	Standard/Low Grade	22.2	18.6
			Total	100.0	100.0
Net Cost of Production		Per Farm	Per Female	Per Mink Produced	
Total Cash Expenses		\$176542	\$123.58	\$39.49	
Plus: Depreciation		13705	9.59	3.07	
Inventory Change (Feed, Supplies)		1105	0.77	0.25	
Interest on Average Equity @ 6.0%		17010	11.91	3.80	
Unpaid Family Labour		3120	2.18	0.70	
Operator Labour		22286	15.60	4.98	
Less: Other Income		8998	6.30	2.01	
Net Cost of Producing Mink		\$224770	\$157.34	\$ 50.27	

- (1) The number of breeder males and the number of breeder females is determined by averaging the beginning and ending number of males or females kept for breeding.



***Tree Fruit  
Farm Business  
Management  
Analysis***

**Income Statement**

	# Bushels	Total \$'s	\$'s Per Bushel	% of Total
Fresh Apple Sales	11738	74803	3.28	59.66
U-pick Apple Sales	151	1160	0.05	0.93
Processed Apples	4762	21835	0.96	17.42
Juice/cider Apples	6134	16807	0.74	13.41
<b>Total Apples Sales</b>	<b>22785</b>	<b>\$114605</b>	<b>\$5.03</b>	<b>91.41</b>
Tripartite Stabilization Income		385	0.02	0.31
Crop Insurance Income		0	0.00	0.00
Rootstalk/Tree Subsidies		1173	0.05	0.94
Other Apple Subsidies		49	0.00	0.04
Misc. Apple Income		568	0.02	0.45
<b>Other Apple Revenue</b>		<b>\$2175</b>	<b>\$0.10</b>	<b>1.73</b>
Other Tree Fruits		2343	0.10	1.87
Other Crops		3081	0.14	2.46
Miscellaneous Income		3169	0.14	2.53
<b>Total Non-Apple Revenue</b>		<b>\$8593</b>	<b>\$0.38</b>	<b>6.85</b>
<b>Total Farm Revenue</b>		<b>\$125373</b>	<b>\$5.50</b>	<b>100.00</b>

Statement of Expenses

	Total \$'s	\$'s Per Bushel	% of Total
Harvesting Labour	23148	1.02	17.69
Other Labour	26166	1.15	20.00
Spray: Herbicides	1229	0.05	0.94
Insecticides	4937	0.22	3.77
Fungicides	10883	0.48	8.32
Other	1190	0.05	0.91
Fertilizers & Lime	2166	0.10	1.66
Containers & Bins	1833	0.08	1.40
Rootstalk & Trees	1921	0.08	1.47
Bee Rental	2278	0.10	1.74
Other Orchard Expenses	459	0.02	0.35
Fuel & Lubricants	1749	0.08	1.34
Tractor & Machinery Repair	3516	0.15	2.69
Truck & Vehicle Expense	4849	0.21	3.71
Building & Bin Repair	1893	0.08	1.45
Custom Work & Trucking	2424	0.11	1.85
Specialized Services	2712	0.12	2.07
Rental Expense	529	0.02	0.40
Office Expense	2951	0.13	2.26
Utilities	612	0.03	0.47
Crop Insurance	2000	0.09	1.53
Other Insurance	2177	0.10	1.66
Tripartite Premiums	2065	0.09	1.58
Fees & Licenses	753	0.03	0.58
Property Taxes	804	0.04	0.61
Interest Expense: Operating	2336	0.10	1.79
Interest Expense: Term	5192	0.23	3.97
Miscellaneous Expense	2498	0.11	1.91
<b>Total Apple Related Expenses</b>	<b>\$115270</b>	<b>\$5.06</b>	<b>88.10</b>
Other Tree Fruits Expense	539	0.02	0.41
Other Crops Expense	599	0.03	0.46
Miscellaneous Non-Apple	2680	0.12	2.05
<b>Total Non-Apple Expense</b>	<b>\$3818</b>	<b>\$0.17</b>	<b>2.92</b>
<b>Total Cash Expenses</b>	<b>\$119088</b>	<b>\$5.23</b>	<b>91.02</b>
Building Depreciation	2118	0.09	1.62
Machinery & Equipment Depreciation	9635	0.42	7.36
<b>Total Depreciation</b>	<b>\$11753</b>	<b>\$0.52</b>	<b>8.98</b>
<b>Total Farm Expenses</b>	<b>\$130841</b>	<b>\$5.74</b>	<b>100.00</b>

**Income Summary**

	<b>Total \$'s</b>	<b>\$'s Per Bushel</b>
Total Farm Revenue	125373.00	5.50
Total Cash Expenses	119088.00	5.23
Net Cash Income	<b>\$6285.00</b>	<b>\$0.28</b>
Plus: Inventory Change, Supplies	304.00	0.01
Less: Depreciation Expense	11753.00	0.52
Net Farm Income	<b>\$(5164.00)</b>	<b>\$(0.23)</b>
1. Less: Cost for Unpaid Family Labour	1196.97	0.05
Less: Interest on Equity @ 6%	6589.47	0.29
2. Labour and Management Income	<b>\$(12950.44)</b>	<b>\$(0.57)</b>
1. Unpaid family labour is charged at the farm rates for harvesting and other labour. Management labour was charged at \$12 per hour.		
2. Labour and Management Income represents the amount of income left the operator for his labour and management skills.		

*1996 Tree Fruit Farm Management Analysis*

**Net Cost of Production**

Item	Total \$'s	\$'s Per Bushel
Total Cash Expenses	119088	5.23
Less: Non-apple expenses	3818	0.17
<b>Total Apple Cash Expenses</b>	<b>\$115270</b>	<b>\$5.06</b>
Total Cash Revenue	125373	5.50
Less: Non-apple Sales	8593	0.38
<b>Total Cash Sales (Apple Related)</b>	<b>\$116780</b>	<b>\$5.13</b>
<b>Net Cash Return</b>	<b>\$1510</b>	<b>\$0.07</b>
Apple Cash Expenses Plus: Depreciation	11753	0.52
1 (Supplies) Inventory Change	304	0.01
Interest on Equity	6589	0.29
Unpaid Family Labour	1197	0.05
Operator Labour	14744	0.65
<b>Equals: Net Cost of Producing Apples</b>	<b>\$149857</b>	<b>\$6.58</b>
Total Bushels of Apples Sold	22785	1
Total Pounds of Apples Sold	956987	42
<b>Total Apple Sales</b>	<b>\$114605</b>	<b>\$5.03</b>
<b>Net Return of Apple Sales</b>	<b>\$(35252)</b>	<b>\$(1.55)</b>
Plus: Crop Insurance	385	0.02
<b>Total Sales Including Stabilization</b>	<b>\$114990</b>	<b>\$5.05</b>
<b>Net Return Including Stabilization</b>	<b>\$(34867)</b>	<b>\$(1.53)</b>
Plus: Subsidy Income	1222	0.05
<b>Total Sales Including Subsidy</b>	<b>\$116212</b>	<b>\$5.10</b>
<b>Net Return Including Subsidy</b>	<b>\$(33645)</b>	<b>\$(1.48)</b>
Plus: Miscellaneous Apple Income	568	0.02
<b>Total Sales Including Miscellaneous</b>	<b>\$116780</b>	<b>\$5.13</b>
<b>Net Return Including Miscellaneous</b>	<b>\$(33077)</b>	<b>\$(1.45)</b>
1. Ending supplies inventory less beginning supplies inventory. 2. Operator labour was charged at \$12/hr. for management labour and \$8/hr. for other labour.		

*Tree Fruit*

**Balance Sheet**

	<b>Beginning \$'s</b>	<b>Ending \$'s</b>
<b>Current Assets</b>		
Cash	1427	3480
Apple Sales Receivables	37258	49581
Supplies	271	575
Other Current Assets	533	100
<b>Total Current Assets</b>	<b>\$39489</b>	<b>\$53736</b>
<b>Term Assets</b>		
Orchard Land	47431	51435
Other Land	39072	41792
Farm Buildings	26534	23897
Machinery & Equipment	42865	41078
Other Term Assets	4746	5313
<b>Total Term Assets</b>	<b>\$160648</b>	<b>\$163515</b>
<b>TOTAL FARM ASSETS</b>	<b>\$200137</b>	<b>\$217251</b>
<b>Liabilities</b>		
Current Liabilities	24393	17431
Term Liabilities	79356	76559
<b>Total Liabilities</b>	<b>\$103749</b>	<b>\$93990</b>
<b>Owner's Equity</b>	<b>\$96388</b>	<b>\$123261</b>

**Financial Analysis**

		1996
1.	Liquidity:	
	Current Ratio	3.08
	Working Capital	\$ 36305
2.	Solvency:	
	Percent Equity Ratio	% 56.7
	Debt to Equity Ratio	0.76
3.	Profitability:	
	Return on Assets	% 0.0
	Return on Equity	% 0.0
	Capital Turnover	Years 1.66
4.	Financial Efficiency:	
	Interest as of % of Revenue	6.00
	Disposable Income	\$ 11477

**Land Use Report**

	<b>Acres</b>
Orchard in Apples	66.9
Orchard in Pears	0.8
Orchard in Other Fruit	0.5
<b>Total Orchard</b>	68.2
Cropland and Pasture	47.9
Woodland and Other	210.7
<b>Total Land</b>	326.8
Orchard in Apples, Bearing	56.37
Orchard in Apples, Total	66.90
% of Apples Acreage Bearing	84.26
Total Number of Trees	12617
Total Number of Bearing Trees	9022
Average Density on all Trees	Trees/Acre 188.59
Average Density on Bearing Trees	Trees/Acres 160.05
Average Age of Trees	Years 13.74

<b>Apple Yields</b>	<b>Bushel/B. Acre</b>	<b>Bushel/Tree</b>
Fresh Apples	210.91	1.32
Processing Apples	84.48	0.53
Cider/Juice Apples	108.82	0.68
<b>Total</b>	404.21	2.53



## 1996 Tree Fruit Farm Management Analysis

### Production & Management Information

#### Sales Information

Variety	Average \$ Received Per Bushel
MacIntosh	5.94
Cortland	6.87
Ida Red (Fresh & Processed)	6.04
Gravenstein	7.27
Red Delicious	6.67
Northern Spy (Processed)	5.87
All Varieties (Fresh)	6.37

#### Yield by Variety

Variety	Bushels Produced	Bushels Per Acre
MacIntosh	5804	395
Cortland	2911	555
Ida Red	1548	364
Gravenstein	1373	470
Red Delicious	845	266
Northern Spy	2115	449

#### Labour Analysis

Operation	Total Hours	Hours Per Total Acres	Hours per Bin
Pruning - Summer	41	4.7	0.25
Pruning - Winter	291	24.7	1.30
Mowing	43	2.8	0.15
Fertilizing & Liming	16	0.9	0.05
Spraying	101	4.8	0.25
Repairs & Maintenance	106	4.1	0.22
Harvesting	301	50.7	2.68
Management	779	13.1	0.69
Other	110	9.0	0.47
<b>TOTAL</b>	<b>1788</b>	<b>114.7</b>	<b>6.06</b>

#### Average Wage Rate

Operation	\$/Hour
Harvest Rate	7.65
All Other Labour	9.61